

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

09/813,214 B

Source:

IFW16

Date Processed by STIC:

7/21/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,
Room 1B03, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER:

09/813,214 B

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrappcd Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
(2) INFORMATION FOR SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences.
- 8 Skipped Sequences
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence.
- 11 Use of <220>
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid.



IFW16

RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/09/813,214B

TIME: 10:42:26

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

5 <110> APPLICANT: Tucker, Kenneth
 7 Plosila, Laura
 11 <120> TITLE OF INVENTION: MORAXELLA CATARRHALIS OUTER MEMBRANE PROTEIN-106
 12 POLYPEPTIDE, GENE SEQUENCE AND USES THEREOF
 16 <130> FILE REFERENCE: 7969-089-999
 20 <140> CURRENT APPLICATION NUMBER: US 09/813,214B
 22 <141> CURRENT FILING DATE: 2001-03-20
 26 <150> PRIOR APPLICATION NUMBER: US 08/968,685
 28 <151> PRIOR FILING DATE: 1997-11-12
 32 <160> NUMBER OF SEQ ID NOS: 20
 36 <170> SOFTWARE: PatentIn version 3.0
 40 <210> SEQ ID NO: 1
 42 <211> LENGTH: 43
 44 <212> TYPE: PRT
 46 <213> ORGANISM: Moraxella catarrhalis
 50 <400> SEQUENCE: 1
 52 Ile Gly Ile Ser Glu Ala Asp Gly Gly Lys Gly Gly Ala Asn Ala Arg
 53 1 5 10 15
 55 Gly Asp Lys Ser Ile Ala Ile Gly Asp Ile Ala Gln Ala Leu Gly Ser
 56 20 25 30
 58 Gln Ser Ile Ala Ile Gly Asp Asn Lys Ile Val
 59 35 40
 61 <210> SEQ ID NO: 2
 63 <211> LENGTH: 8
 65 <212> TYPE: PRT
 67 <213> ORGANISM: Moraxella catarrhalis
 71 <400> SEQUENCE: 2
 73 Gly Thr Val Leu Gly Gly Lys Lys
 74 1 5
 76 <210> SEQ ID NO: 3
 78 <211> LENGTH: 24
 80 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial sequence
 84 <220> FEATURE:
 86 <221> NAME/KEY: primer_bind
 88 <222> LOCATION: 1 to 24
 90 <223> OTHER INFORMATION: contains n
 94 <400> SEQUENCE: 3
 W--> 96 ggnacngtnc tnggnggnaa raar
 99 <210> SEQ ID NO: 4
 101 <211> LENGTH: 72
 103 <212> TYPE: DNA
 105 <213> ORGANISM: Moraxella catarrhalis

(pg.6)
 Does Not Comply
 Corrected Diskette Needed
 (pg.1-2)

Mandatory, if <213> response
 is artificial/unknown, please
 explain in section <220>-<223>

please explain
 what do "N" represent?

pls see item # 11 on error
 summary sheet.

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Input Set : A:\Seq Listing 089-999.txt

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109 <400> SEQUENCE: 4
 110 gaagcggacg ggggggaaagg cggagccaat gcgcgcggtg ataaatccat tgctattggt 60
 112 gacattgcgc aa 72
 115 <210> SEQ ID NO: 5
 117 <211> LENGTH: 24
 119 <212> TYPE: PRT
 121 <213> ORGANISM: Moraxella catarrhalis
 125 <400> SEQUENCE: 5
 127 Glu Ala Asp Gly Gly Lys Gly Gly Ala Asn Ala Arg Gly Asp Lys
 128 1 5 10 15
 130 Ser Ile Ala Ile Gly Asp Ile Ala Gln
 131 20
 134 <210> SEQ ID NO: 6
 136 <211> LENGTH: 24
 138 <212> TYPE: DNA
 140 <213> ORGANISM: Artificial sequence
 142 <220> FEATURE:
 144 <221> NAME/KEY: primer_bind
 146 <222> LOCATION: 1 to 24
 148 <223> OTHER INFORMATION: contains n
 151 <400> SEQUENCE: 6
 W--> 153 ytttyttncn ccnagnacng tncc 24
 156 <210> SEQ ID NO: 7
 158 <211> LENGTH: 24
 160 <212> TYPE: DNA
 162 <213> ORGANISM: Artificial sequence
 164 <220> FEATURE:
 166 <221> NAME/KEY: primer_bind
 168 <222> LOCATION: 1 to 24
 170 <223> OTHER INFORMATION: contains n
 174 <400> SEQUENCE: 7
 W--> 176 ggnacngtnt trggnggnaa raar 24
 179 <210> SEQ ID NO: 8
 181 <211> LENGTH: 9542
 183 <212> TYPE: DNA
 185 <213> ORGANISM: Moraxella catarrhalis
 189 <400> SEQUENCE: 8
 190 ctattgactt aaatcaccat atggttataa tttagcataa tggtaggctt tttgtaaaaa 60
 192 tcacatcgca atattgtttt actgttacta ccatgcttga atgacgatcc aaatcaccag 120
 194 attcattcaa gtgatgtgtt tgtatacgca ccatttaccc taattatttc aatcaaatgc 180
 196 ctatgtcagc atgtatcatt ttttaaggta aaccaccatg aatcacatct ataaagtcac 240
 198 ctttaacaaa gccacaggca catttatggc cgtggcggaa tatgccaaat cccacagcac 300
 200 gggggggggg agctgtgcta cagggcaagt tggcagtgtg cgcactctga gctttgcccg 360
 202 tattgccgcg ctgcgtgtcc tegtatcggt tgcgacgctc aatggcagtg cttatgcagg 420
 204 tateggaatt agtgaagcag acgggggaaa aggcggagcc aatgcgcgcg gtgataaatc 480
 206 cattgctatt ggtgatattg ctacggcact tggtctcaa tctattgcta tcggtgacaa 540
 208 caaaatagtt cataattcaa ataataatgc taatataggt gccaaagcct caggtaatga 600
 210 gtccatcgcc atcgggtggt atgtattggc ttctggtcac gcctcgattg ccacggtag 660
 212 tgatgactta tatttgaaaa aggaacggt acagcaaatc tcagagcttc tacctattat 720

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

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214	tcgcgacag	aaagcattaa	acgatatata	ccaactagct	gacactaatc	ttcaaaaata	780
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218	gggtcatttt	tccaacgcct	ttggtacacg	ggcaacagct	gaaggtagct	attccttggc	900
220	agtgggtcct	accgccacag	ccaaagcagc	atcttcaatc	gctgttggtt	ctaagtcaca	960
222	agctatcggg	tttgacagca	cagccgttgg	tggaagtact	caagttaatt	tgaatcgagg	1020
224	tattgcccta	ggttttggtt	ctcaggtcct	tcagaaggat	aatgatgtaa	atgcagcaaa	1080
226	tgtacgggcc	tatgcaccag	atgataacca	gccaatagac	aaccggtata	aagccacctt	1140
228	caagaatggt	gctacggatg	tattttccat	tggtaatagt	aatgggaatg	acagtatcag	1200
230	gcgtaaaatc	atcaatgtcg	gtgcagggtt	tgcgatatac	gatgcgggtc	atgtggcaca	1260
232	gcttaaagag	gcggtgaggc	tggttaatac	tcaaattact	tttaagggtg	atgatagcaa	1320
234	taatagagta	gaaaaagggt	tggtcaagac	tttaactatc	acaggtggtg	cacagaccag	1380
236	cgcattaacc	gatcataaca	tcggtgtggt	acaaaatggc	gatggtctga	aagttcaact	1440
238	tgctgaaact	ttaaccagcc	ttaaaatggt	taccactgaa	aacctaaccc	ccaacgagaa	1500
240	agttaccgta	ggcaaaaacc	gccttaccac	agataaaaat	ggttttacca	atgatatgaa	1560
242	tggtcattgat	gaaagcaaac	cttatcttga	taaagacact	ggcattcatg	caggtggtca	1620
244	aaagattacc	aaacttactg	ctggtgtagt	agatgacgat	gcggcaactt	atggacagct	1680
246	taaaaaagtt	aaccaaaccg	ctgaaagtgc	tctacaaacc	tttaccgtta	aaaaggtaga	1740
248	taaaaatggt	aatgatgcta	atgacagcaa	aatcatcacc	gtgggtaaaa	ataacaaacc	1800
250	agacggtact	caagtcaaca	ccctaaaact	caaagggtgaa	aacggtgttg	atgttacaac	1860
252	cgaaacaaat	ggtacagtta	cctttgggct	taacccaaat	aacggtctga	ccgttggcaa	1920
254	cagcaccccta	aacaacgatg	gcttatctgt	taaaaacacc	aataagtaaca	aacaaatcca	1980
256	agtcggtgct	gatggcatta	catttactga	tatcagcaat	agtaagccag	gtgctggcat	2040
258	tgaaaatacc	actcgcatta	ccagagacgg	tattggtttt	gctaataata	ctggttcatt	2100
260	ggatgcaaac	aaaccccgcc	taaccccaac	tggtcattaac	gcaggtggta	aagagctgac	2160
262	caatgtccaa	tctgccatta	accctgctac	caatgggtgg	cagctagact	ttatgaaccg	2220
264	cctaagcact	gctaataaccg	aaaaatcagg	ctctgccgcc	accattaaag	acttatacaa	2280
266	cctatcacaa	gtaccgctga	cctttgcagg	tgatacaggt	cctaattgtc	ccaaaaaact	2340
268	gggcgagatt	ttaaagggtta	aagggtggtta	aaccacagct	gatgatttaa	ccaaaaataa	2400
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286	tatcggtgat	agtactgaca	aaacccgtgc	cgccagcatt	ggtgatgtgc	taaacgcagg	2940
288	ctttaaccta	aaaaataatg	gtgacgcca	agactttgtc	tccacttatg	acactgttga	3000
290	ttttatcaat	ggcaatgcca	ccaccgctaa	agtcacttat	gatggcaaaag	ccagtaaagt	3060
292	ggcgtatgat	gtcaatgtgg	atggtacaac	cattcatcta	acaggcgctg	atggcaataa	3120
294	aaaccaaatt	ggcgtaaaaa	ccaccacact	gaccaaaca	gatgctaagg	gtgataaagc	3180
296	aattaacttt	agtgttaact	ctggtgatga	caaagccctt	attaacgcca	aagacatcgc	3240
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300	cctacaaacc	tttcaagtca	aaaaagtcaa	agaaaatggt	gatgatgata	atgacgctga	3360
302	caccatcacc	gtgggtaaaag	atgcaaaaaa	caatcaagtc	aacaccctaa	aactcaaagg	3420
304	taaaaacggg	cttgatattc	aaaccaataa	agatggtacg	gttacctttg	gcattaacac	3480
306	ccaaagcggt	cttaaagccg	gcaacaatac	cactctaaac	aacaatggct	tgtctattaa	3540
308	aaacaccgct	ggttaacgaac	aaatccaagt	cgggtgctgat	ggcgtaaggt	ttgccaaagt	3600
310	taataatggt	gttgtaggtg	ctggcattga	tggcacaact	cgcattacca	gagatgaaat	3660

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312	tggctttgct	gggactaatg	gctcacttga	taaaagcaaa	ccccacctaa	gcaaagacgg	3720
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316	caatgatgct	gtgacaggcg	gcaagattta	tgatttaaaa	accgaacttg	aaaacaaaat	3840
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332	taacttgcaa	ggcaatggtg	aagcggttga	ctttgtctcc	acttatgaca	ctgtcaactt	4320
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362	ctcaagcgg	caagccaaag	caaacacccc	tgtgctaagt	gccaatgggc	tggacctggg	5220
364	tggcaaggct	atcagcaatg	tgggcaaaag	cacaaaagac	accgacgctg	ccaatgtaca	5280
366	acagttaaac	gaagtacgca	acttgttggg	tcttggtaat	gctggtaatg	ataacgctga	5340
368	cggcaatcag	gtaaacattg	ccgacatcaa	aaaagaccca	aattcagggt	catcatctaa	5400
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398	aggtgaggtc	agtgccacca	gcaccgatgc	ggtcaatggt	agccagttgt	acaaagccac	6300
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402	agccaatgca	gggatttcat	cagcgatggc	gatggcgctc	atgccacaag	cctacattcc	6420
404	tggcagatcc	atgggtaccg	ggggatttgc	caccacaac	ggtcaagggtg	cgggtggcag	6480
406	gggactgtcg	aagctgtcgg	ataatgggtca	atgggtattt	aaaatcaatg	gttcagccga	6540
408	taccaaggc	catgtagggg	cggcagttgg	tgcaggtttt	cacttttaag	ccataaatcg	6600

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410	caagatttta	cttaaaaaatc	aatctcacca	tagttgtata	aaacagcatc	agcatcagtc	6660
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414	ttcaccatga	ccaaatcgcc	attgatcata	ggtaaactta	ttgagtaa	tttatcaatg	6780
416	tagttgttag	atatggttaa	aattgtgcca	ttgacaaaa	aattaccgat	ttatcccgaa	6840
418	aatttctgat	tatgatcact	tttcataaat	ttccccaatt	tgtctttata	aatatcccaa	6900
420	gaaatggtat	tattttattg	ccatcagcat	atgcgacaac	tcacgtatc	atctttttat	6960
422	cataaaaatg	caaataggca	tatgcatttt	ttgaattgaa	cttacgca	gagagatccc	7020
424	ctcataat	ccccaaagcg	taaccatgtg	tgaataaatt	ttgagctagt	aggggtgcag	7080
426	ccacgagtaa	gtcttccctt	gttattgtgt	agccagaatg	ccgcaaaact	tccatgccta	7140
428	agcgaaactgt	tgagagtacg	tttcgatttc	tgactgtgtt	agcctggaag	tgcttgcccc	7200
430	aaccttggtt	ctgagcatga	acgcccgcga	gccaacatgt	tagttgaagc	atcagggcga	7260
432	ttagcagcat	gatatacaaa	cgtctcgagc	tgctcggtcg	gctatggcgt	aggcctagtc	7320
434	cgtaggcagg	acttttcaag	tctcggaagg	tttcttcaat	ctgcattcgc	ttcgaataga	7380
436	tattaacaag	ttgtttgggt	gttcgaattt	caacaggtaa	gttagttgct	agaatccatg	7440
438	gtccttttgc	cgacgtgag	tagattttag	gtgacgggtg	gtgacaatga	gtcgtgtcg	7500
440	agcgtgtgatt	ttttcggcct	ttagagcgag	atttatacaa	tagaatttgg	catgagattg	7560
442	gattgtcttt	agtcagcctc	ttatagccta	aagtctttga	gtgactagat	gacatatcat	7620
444	gtaagtgtgt	gataggtttc	cagttttccg	ctcctaggtc	tgcatattgt	acttttccctc	7680
446	ttactcgact	taaccagtac	caaccagct	tctcaacgga	tttataccat	ggcactttaa	7740
448	agccagcatc	actgacaatg	agcgggtgtg	tgttactcgg	tagaatgctc	gcaaggtcgg	7800
450	ctagaaattg	gtcatgagct	ttctttgaac	attgctctga	aagcgggaac	gcttttctcat	7860
452	aaagagtaac	agaacgaccg	tgtagtgcga	ctgaagctcg	caataccata	agcgtttttt	7920
454	gtcacgggat	atcagaccag	tcaacaagta	caatgggcat	cgtattgccc	gaacagataa	7980
456	agctagcatg	ccaacggtat	acagcgagtc	gctctttgtg	gaggtgacga	ttacctaaaca	8040
458	atcggctgat	tcgtttgatg	ttatgttttg	ttctcgcttt	ggttggcagg	ttacggccaa	8100
460	gttcggtgaag	agtgaaggtt	ttacagtcaa	gtaaggcgtg	gcaagccaac	gttaagctgt	8160
462	tgagtcgttt	taagtgtaat	tcggggcaga	attggtaaag	agagtcgtgt	aaaatatcga	8220
464	gttcgcacat	tttgttgtct	gattattgat	ttttggcgaa	accatttgat	catatgacaa	8280
466	gatgtgtatc	taccttaact	taatgatttt	gataaaaatc	attaggggat	tcacagact	8340
468	tacgcatact	tcattatggg	aattaggtca	gtaattatga	caaaaaatta	tgcatatta	8400
470	tccgtctcag	ataaaacgca	aatcgttgaa	tttgcccaag	gtttggtaga	atctggcttt	8460
472	ggtattttat	ccacaggtgg	tacttttaaa	ctcttaaaag	aacatgggat	tgacgccatt	8520
474	gaggtttctg	cccatacagg	ttttgctgaa	atgatggatg	gtcgtgttaa	gaccctacat	8580
476	cccaaaattc	atggtgggat	tttggggcgt	cgtggcattg	atgatgccat	tatgaatgaa	8640
478	catggcattg	atcgcatgga	tatcgttgtc	gtgaatttat	atccatttgc	caacacggtc	8700
480	gccaaagacg	gtgttggtat	gtctgatgcg	attgaaaata	ttgatattgg	tgggcctgct	8760
482	atggtacgct	cagcgcgcaa	aaatcatgcc	catgttggtg	ttatcaccag	cccaaatgac	8820
484	tactcacgca	tcctagatga	actaaaaaac	caaggtcatt	taagccacaa	cactcgtttt	8880
486	gattttggcag	tcaaagcatt	tgaacacact	gccgcctatg	atggtatgat	tgccagctgg	8940
488	ctaggtgcac	gcttaccagt	ggataaagag	acggcaccca	gtgatgatgc	cactgcaacc	9000
490	actcaatttt	cacgcacttt	taatcaccaa	ttcaccaaag	cacaagagct	tagatatggc	9060
492	gaaaaceccac	atcagtcagc	agccttttat	gtagatgatc	atgcaacaga	agcgtctggt	9120
494	gcgactgcac	agcaattaca	aggtaaagcg	ttgtcttata	ataatattgc	tgataccgat	9180
496	gcggcacttg	agtgtgtcaa	atcttttacc	acgcctgctt	gtgtgattgt	caaacatgcc	9240
498	aatccttggtg	gtgttgcaac	atcagaaaaac	ggatatttag	atgcttatca	cttagcatat	9300
500	gcaaccgatc	ctgaatctgc	ctttgggtggc	attattgcct	ttaaccgaga	attagacagt	9360
502	gatacagccc	gtaccatcgt	tgagcgtcaa	tttgttgaag	tcacatcgc	accaagcatc	9420
504	gctgaagggtg	ttctagagcg	gccgcggggc	cacgattttt	ccacccgggt	ggggtagacc	9480
506	gtaagtgtac	ccaattcgcc	ctatagttag	tcgtattaca	attcactggc	cgtcggtttta	9540

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/813,214B

DATE: 07/21/2004
TIME: 10:42:27

Input Set : A:\Seq Listing 089-999.txt
Output Set: N:\CRF4\07212004\I813214B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 3,6,9,12,15,18
Seq#:6; N Pos. 7,10,13,16,19,22
Seq#:7; N Pos. 3,6,9,15,18
Seq#:13; N Pos. 6,12,15
Seq#:14; N Pos. 4,13

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:14; Line(s) 1034

VERIFICATION SUMMARY

DATE: 07/21/2004

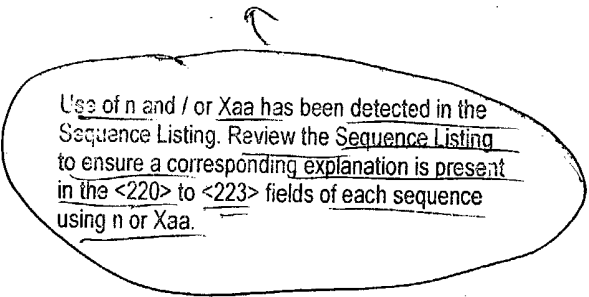
PATENT APPLICATION: US/09/813,214B

TIME: 10:42:27

Input Set : A:\Seq Listing 089-999.txt

Output Set: N:\CRF4\07212004\I813214B.raw

L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:1034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0



Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.